Message

From: Goldmann, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2BF5B6F833EA46CCA6ABE2BB68961167-EGOLDM02]
Sent: 9/4/2018 8:50:15 PM
To: JAMES, William L CIV USARMY CELRD (US) [William.L.James@usace.army.mil]; Cummings, Deanna L CIV USARMY CESPA (US) [Deanna.L.Cummings@usace.army.mil]
CC: Leidy, Robert [Leidy.Robert@epa.gov]
Subject: Rosemont Mine: July 2018 groundwater study
Attachments: azu_etd_16498_sip1_m.pdf

Dear William and Deanna,

I am providing you with a copy of a M.S. Thesis by Rachel Tucci, UA, titled, "Using isotopes and solute tracers to infer groundwater recharge and flow in the Cienega Creek watershed, SE Arizona." (July 2018). This study concludes that recharge in the Cienega Creek watershed is from relatively old groundwater and limited modern recharge. The Santa Rita Mountains mountain block and mountain front area is where recharge occurs. The study suggests that future increases in groundwater capture or pumping from projects such as the Rosemont Mine, may impact surface waters and the hydrologically connected riparian areas and associated aquatic life.

Equally concerning from both a water quantity and water quality perspective, is the placement of an open pit mine, with a chronic source of toxic heavy metals such as cadmium, mercury and selenium, within the recharge zone of an aquifer which serves as a drinking water supply.

I am available if you have any questions, or would like to discuss this study further.

Sincerely, Elizabeth

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